

# U.S. EPA Science Advisory Board

## Advisory Council on Clean Air Compliance Analysis

### FY 2004 Member Biosketches

#### Advisory Council on Clean Air Compliance Analysis (COUNCIL)

#### Allen, David T.

University of Texas

Dr. David Allen is the Gertz Professor of Chemical Engineering and the Director of the Center for Energy and Environmental Resources at the University of Texas at Austin. His research interests lie in environmental reaction engineering, particularly issues related to air quality and pollution prevention. He is the author of four books and over 125 papers in these areas. The quality of his research has been recognized by the National Science Foundation (through the Presidential Young Investigator Award), the AT&T Foundation (through an Industrial Ecology Fellowship) and the American Institute of Chemical Engineers (through the Cecil Award for contributions to environmental engineering). Dr. Allen was a lead investigator in one of the largest and most successful air quality studies ever undertaken: the Texas Air Quality Study ([www.utexas.edu/research/ceer/txaqs](http://www.utexas.edu/research/ceer/txaqs)). His current research is focussed on using the results from that study to provide a sound scientific basis for air quality management in Texas. In addition, Dr. Allen is actively involved in developing Green Engineering educational materials for the chemical engineering curriculum. His most recent effort is a textbook on design of chemical processes and products, jointly developed with the U.S. EPA. Dr. Allen received his B.S. degree in Chemical Engineering, with distinction, from Cornell University in 1979. His M.S. and Ph.D. degrees in Chemical Engineering were awarded by the California Institute of Technology in 1981 and 1983. He has held visiting faculty appointments at the California Institute of Technology, the University of California, Santa Barbara, and the Department of Energy.

#### Cameron, Trudy Ann      Chair

University of Oregon

Trudy Ann Cameron is the Raymond F. Mikesell Professor of Environmental and Resource Economics at the University of Oregon. She holds a Ph.D. in Economics from Princeton University (\*82), and was a member of the faculty in Economics at UCLA for seventeen years before moving to UO in January of 2002. She has served as a member of the board of directors, as well as vice-president, of the Association of Environmental and Resource Economics, and as an associate editor for the Journal of Environmental Economics and Management and the American Journal of Agricultural Economics. For the EPA's Science Advisory Board, she has served on the Environmental Economics Advisory Committee and the Economics and Assessment Working Group of the Children's Health Protection Advisory Committee, and she now chairs the Advisory Council for Clean Air Compliance Analysis. Dr. Cameron's research concentrates on the methodology of non-market resource valuation, with special emphasis on econometric techniques for the analysis of stated preference survey data. Her recent projects have included a study of popular support (i.e. willingness to pay) for climate change mitigation programs (funded by the National Science Foundation). A current project, begun at UCLA with former colleague JR DeShazo, uses stated preference survey methods to elicit household choices that reveal willingness to pay to avoid illness, injury, and death. The "value of a statistical life" is a key ingredient in the benefit-cost analysis of many environmental, health, and safety regulations, and this project seeks to more clearly identify how the context of such choices influences the public's willingness to pay for such policies.

#### Chestnut, Lauraine

Stratus Consulting Inc

Lauraine G. Chestnut, a manager at Stratus Consulting, Inc., is an economist who specializes in the quantification and monetary valuation of human health and environmental effects associated with air pollutants. She has 20 years of experience with Stratus Consulting and its predecessors working for clients including the U.S. Environmental Protection Agency, California Air Resources Board, Environment Canada, World Bank, and Asian Development Bank, quantifying the damages of air pollution, including human health effects, visibility aesthetics, materials damages, and crop damage. She has conducted original economic and survey research to estimate the value to the public of protecting human health and visibility aesthetics from the effects of air pollution. She has developed quantification models to estimate the health benefits of reductions in air pollutants that have been used to assess the benefits of provisions of the Clean Air Act in the U.S., proposed Canadian air quality standards, air quality standards in Bangkok, and elsewhere. Ms. Chestnut has published articles related to this work in Land Economics, Environmental Research, Journal of the Air and Waste Management Association, and Journal of Policy Analysis and Management, and as chapters in the following titled books: Valuing Cultural Heritage, Air Pollution and Health, and Air Pollution's Toll on Forests and Crops. Ms. Chestnut managed an epidemiology and economic study of the health effects of particulate air pollution in Bangkok, working closely with the Thai Pollution Control Department, the School of Public Health at Chulalongkorn University, and the World Bank. Ms. Chestnut co-authored publications on the Bangkok studies in the Journal of the Air and Waste Management Association, Environmental Health Perspectives, American Journal of Agricultural Economics, Journal of Exposure Analysis and Environmental Epidemiology. Ms. Chestnut received a B.A. in economics from Earlham College, Richmond, Indiana, in 1975, and an M.A. in economics from the University of Colorado, Boulder, in 1981. She is a member of the Association of Environmental and Resource Economists and of the Air and Waste Management Association.

## **Cummings, Ronald G.**

### **Georgia State University**

Dr. Ronald G. Cummings is currently the Noah Langdale Jr. Professor of Environmental Policy at Georgia State University, as well as an Adjunct Professor at Albany State University. He was a Professor of Economics at the University of New Mexico (1975-93), Department Chairman and Professor in the Department of Resource Economics at the University of Rhode Island (1972-75), Program Director, Mexico City, for Resources for the Future, Inc. (1969-72), and Assistant Professor of Economics and Agriculture Economics at Montana State University (1967-69). He was awarded the Distinguished Service Award by the Association of Environmental and Resource Economists in 1991, and was appointed to the New Mexico Eminent Scholar Program by the New Mexico Commission on Higher Education in 1989. Professor Cummings served as President of the Association of Environmental Resource Economists in 1983, and was a member of its Board of Directors in 1981 and from 1987 to 1996. He served as a member of the Executive Committee, Section on Hydrology, of the American Geophysical Union (1983-1987). Professor Cummings served as Policy Sciences Editor for Water Resources Research between 1984-87, and as the Managing Editor for the Journal of Environmental Economics and Management from 1987 to 1996. He has served on study panels for the National Academy of Sciences and the National Research Council Panel, and the EPA's Science Advisory Board Clean Air Act Compliance Analysis Council. He has served on the editorial boards or advisory councils for the Natural Resources Journal, Environment and Development Economics, Land Economics, and Southwestern Review of Management and Economics. He has served on a number of state and federal study groups/task forces regarding hazardous waste, nuclear waste disposal, materials management, and water resources. Dr. Cummings has a Ph.D. in Economics from the University of Kansas, and an M.S and B.S. in Economics from the University of Missouri.

## **Hammitt, James**

### **Harvard University**

James K. Hammitt is Associate Professor of Economics and Decision Sciences and Director of the program in Environmental Science and Risk Management at the Harvard School of Public Health. His teaching and research concern the development and application of quantitative methods—including benefit-cost, decision, and risk analysis—to health and environmental policy in both industrialized and developing countries. Research interests include the management of long-term environmental issues such as global climate change and stratospheric-ozone depletion, the evaluation of corollary benefits and countervailing risks associated with risk-control measures, and the characterization of social preferences over health and environmental risks using revealed-preference and contingent-valuation methods. Professor Hammitt is a member of the National Academy of Sciences Committee on Implications of Dioxin in the Food Supply, the American Statistical Association Committee on Energy Statistics (the Advisory Committee to the US Energy Information Administration), and the National Science Foundation panel for Decision, Risk and Management Science. He holds degrees in Applied Mathematics (A.B., Sc.M.) and Public Policy (M.P.P., Ph.D.) from Harvard University. Previously, he was Senior Mathematician at the RAND Corporation and on the faculty of the RAND Graduate School of Policy Studies.

## **Johnson, F. Reed**

### **Research Triangle Institute**

Dr. F. Reed Johnson is Principal Economist at Research Triangle Institute. He was recently named as one of the first four RTI Fellows. He has served on the economics faculties of Illinois State University, Simon Fraser University, the Stockholm School of Economics, the University of Stockholm, Linköping University, and the U.S. Naval Academy. He currently is Adjunct Professor of Public Policy at the University of North Carolina at Chapel Hill. He is also a member of RTI's Scientific Advisory Council. From 1994 to 2001 he was Vice President for Research and Development at Triangle Economic Research. He previously worked as an economist in the Office of Policy Analysis, U.S. Department of the Interior, and in the Office of Policy, Planning, and Evaluation, U.S. Environmental Protection Agency. Dr. Johnson received his B.A. degree in economics from Occidental College in 1970 and his Ph.D. degree in economics from the State University of New York, Stony Brook in 1974. He has been awarded a Brookings Economic Policy Fellowship and two Fulbright-Hayes scholarships to Sweden. As a staff member in the U.S. Environmental Protection Agency's environmental economics research program during the 1980s, Dr. Johnson helped pioneer development of basic nonmarket valuation techniques. These techniques are now widely used for benefit-cost analysis in health and environmental economics. He has designed and analyzed numerous surveys for measuring willingness to pay for health-risk reduction and improved environmental quality. His current research includes developing improved conjoint analysis methods for quantifying patient and physician preferences for health-care interventions and health risks.

## **Kiel, Katherine**

### **College of the Holy Cross**

Dr. Katherine Kiel has been an Associate Professor in Economics at the College of the Holy Cross since 2001. She received her A.B. from Occidental College in 1982 and her Ph.D. in Economics from the University of California at San Diego in 1989 where she did research on housing appreciation rates. She is a board member for the New England Economic Project, a non-profit organization that provides objective economic analyses and forecasts for the New England area. She currently study the impact of various kinds of pollution on house prices, with some research funded by the U.S. Environmental Protection Agency. She has published in the areas of real estate price indices, racial discrimination in the housing market, and on the demand for environmental quality in the U.S. She has published papers in the Journal of Environmental Economics and Management, Land Economics, the Journal of Urban Economics and other peer-reviewed journals. She has acted as a referee for more than fifteen different journals.

## **Kolstad, Charles**

### **University of California**

Charles Kolstad is the Donald Bren Professor of Environmental Economics and Policy at the University of California, Santa Barbara, where he is jointly appointed in the Department of Economics and the Bren School of Environmental Science and Management. Most of Prof. Kolstad's research has been in the area of regulation, particularly environmental regulation. Recently, he has also done work in environmental valuation theory. He is particularly interested in the role of information in environmental decision-making and regulation. Currently he has a major research project on the role of uncertainty and learning in controlling the precursors of climate change. His past work in energy markets has focused on coal and electricity markets, including the effect of air pollution regulation on these markets. Prof. Kolstad is the editor of Resource and Energy Economics, has been an Associate Editor of the Journal of Environmental Economics & Management (JEEM), and is currently on the editorial board of Land Economics and JEEM. Prof. Kolstad is the president of the Association of Environmental and Resource Economists (AERE). He has also served on AERE's Board of Directors. With over 100 publications, he has published in a variety of journals including the American Economic Review, Journal of Political Economy, Review of Economic Studies, Review of Economics and Statistics, Land Economics and The Journal of Environmental Economics and Management (JEEM). He received his Ph.D. from Stanford (1982), his M.A. from Rochester and his B.S. from Bates College.

## **Kuenzli, Nino**

### **University of Southern California**

Dr. Nino Künzli is Associate Professor at University of Southern California Keck School of Medicine (Department of Preventive Medicine; Environmental Health Science Division), Los Angeles. As an environmental epidemiologist, his main focus are exposure to and health effects of ambient air pollution and the public health impact of these effects. He is a co-investigator and member of research teams such as the Swiss Study on Air Pollution and Lung Diseases in Adults (SAPALDIA; Swiss National Science Foundation), the European Community Respiratory Health Survey II (European Community Research Programs), where he leads the Air Pollution Central Unit, the European Population Exposure Distribution Assessment Study (EXPOLIS), and the UC Berkeley Ozone Study (Prof. Ira Tager; NIH grant). At USC he collaborates with the repeated cohort Children Health Study on air pollution and health in 12 South Coast Basin communities (NIH). He serves on national and international expert committees and as reviewers of the major journals in this field. With the Trilateral European Air Pollution Impact Assessment project, published in Lancet, he intensified particularly a debate about the interpretation of air pollution epidemiology and its application to risk assessment. The concepts published in the American Journal of Epidemiology have been subject of several committees such as from WHO, leading to methodological guidelines and further work by many others. He was a member of the U.S. National Academy of Sciences NRC Committee on Estimating the Health-Risk-Reduction Benefits of Proposed Air Pollution Regulations which also addressed the issue of how to interpret effect estimates from different study designs. He holds a B.S and MD from the University of Basel, and a Ph.D. and M.P.H. from the University of California, Berkeley.

## **Lave, Lester B.**

### **Carnegie Mellon University**

Lester B. Lave is University Professor and Higgins Professor of Economics at Carnegie Mellon University, with appointments in the Business School, Engineering School, and the Public Policy School. Reed College granted him a B.A. and Harvard University a Ph.D. in economics. His research has focused on health, safety, and environmental issues, from the effect of air pollution on mortality to estimating the benefits and costs of automobile safety standards, risk analysis of carcinogenic chemicals, testing the carcinogenicity of chemicals, valuing natural resources and global climate change. As a Senior Fellow at the Brookings Institution from 1978-1982, he investigated a variety of regulatory and risk analysis issues. Lave has served as a consultant to a large number of federal and state agencies, as well as corporations. He was elected to the Institute of Medicine of the National Academy of Sciences, is a past president of the Society for Risk Analysis, and has served on many committees of the National Academy of Sciences, AAAS, American Medical Association, and Office of Technology Assessment. Lave is the director of the Carnegie Mellon University university-wide Green Design Initiative (Practical Pollution Prevention). This program is focused on using pollution prevention and sustainable development to boost economic development. The program has partnerships with leading companies to address these issues and design products and processes for the environment. Although it is only four years old, the program has already received extensive support from IBM, the National Science Foundation, the Department of Energy, the Environmental Protection Agency, Texaco, the American Plastics Council, AT&T, Xerox, NCR, General Motors, Ford, Chrysler, Union Carbide, Alcoa, and other industrial companies. Lave is also a principal in the Carnegie Mellon Global Change Center sponsored by NSF.

## **McConnell, Virginia**

### **Resources for the Future**

Virginia D. McConnell is currently Senior Fellow at Resources for the Future and Professor of Economics at the Baltimore Campus of the University of Maryland (UMBC). She is currently a member of several EPA Advisory Committees, including the EPA Clean Air Act Advisory Committee, Subcommittee on Mobile Sources Technical Review, and the Chesapeake Bay Program Advisory Committee, Air Subcommittee. She recently served on a National Academy of Sciences Panel, Board on Environmental Studies and Toxicology, to evaluate vehicle emission inspection programs. In the past, she worked with the President's Commission on Environmental Quality, and was awarded a Gilbert White Fellowship at Resources for the Future. She received a B.A. in Economics from Smith College in 1969 and Ph.D. in Economics from the University of Maryland in 1978. Her research interests are in the general area of air pollution and urban transportation, and more recently on the link between urban growth, transport and the environment. She has just completed work on a review article on 'Vehicles and the Environment' for the International Yearbook of Environmental and Resource Economics. Her published work has focused on evaluation of policies and policy design for the reduction of vehicle pollution; analysis of the productivity effects of environmental regulations; the effect of environmental regulations on firm location; and transport externalities and urban structure. In addition, she is currently studying the role of economic incentive policies for achieving goals of more efficient urban growth.

## **Ostro, Bart**

### **California Office of Environmental Health Hazard Assessment (OEHHA)**

Bart Ostro, Ph.D., is currently the Chief of the Air Pollution Epidemiology Unit, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency. His primary responsibilities are to formulate the Agency's recommendations for state ambient air quality standards and to investigate the potential health effects of criteria air pollutants. His previous research on mortality and morbidity effects of air pollution, has contributed to the determination of federal and state air pollution standards for ozone and particulate matter. Dr. Ostro was also a co-author of the EPA regulatory impact analysis that was a basis for the federal ban of lead in gasoline. Dr. Ostro has served as a consultant with several federal and international institutions including the World Health Organization and the World Bank, and with several foreign governments including Mexico, Indonesia, Italy, the European Union, Thailand, and Chile. He currently serves on the National Academy of Sciences' Committee on Estimating the Health Risk Reduction Benefits of Proposed Air Pollution Regulations, and is on the Scientific Oversight Committee for ATHENA (Air Pollution Health Effects in Europe and North America) for the Health Effects Institute. Dr. Ostro received a Ph.D. in Economics from Brown University and a Certification in Environmental Epidemiology from the State of California. He has published over 60 articles on air pollution epidemiology and environmental economics in peer reviewed journals. His current research interests involve conducting epidemiologic studies on the mortality and morbidity effects of criteria air pollutants, examining the health effects of traffic, and quantifying the health benefits and associated uncertainties related to air pollution control.

## **Smith, V. Kerry**

### **North Carolina State University**

Dr. V. Kerry Smith is University Distinguished Professor and Director, Center for Environmental and Resource Economic Policy in the Department of Agricultural and Resource Economics at North Carolina State University, and he is a University Fellow in the Quality of the Environment Division of Resources for the Future. Since October 2000 he has been a member of the Advisory Council on Clean Air Compliance Analysis of the U.S. Environmental Protection Agency's Science Advisory Board, and in 2001 he was a member of the Arsenic Rule Benefits Review Panel of EPA's SAB. Dr. Smith received his AB in Economics from Rutgers University in 1966 and his Ph.D. in Economics there in 1970. He presented the Frederick V. Waugh Lecture for the American Agricultural Economics Association in 1992, and at the 2002 AAEA annual meeting he was named an association fellow, the association's most prestigious honor. In addition to the AAEA, he is a member of the American Economic Association, the Southern Economic Association, the Association of Environmental and Resource Economists, and numerous other professional associations. He has held editorial positions with the Journal of Environmental Economics and Management, Land Economics, Review of Economics and Statistics, and other professional journals. His research interests include non-market valuation of environmental resources, role of public information in promoting private risk mitigation, environmental policy and induced technical change, non-point source pollution and nutrient policy.

## **Walcek, Chris**

### **State University of New York**

Dr. Chris Walcek is Senior Research Scientist at the Atmospheric Sciences Research Center of the State University of NY Albany. He holds an M.S. and PhD, in Atmospheric Sciences from UCLA. His area of expertise and research activities focus on physical meteorology and cloud physics, with specific emphasis on acid rain, ozone formation, heterogeneous chemistry, numerical methods air quality modeling, mercury pollution, and aircraft impacts. He has chaired the American Meteorological Society Atmospheric Chemistry committee 1996-2000.